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REMARKS

Claims 1-10 are pending in the present application and Applicants are amending the specification and traversing the claim rejections. Applicants believe that no new matter has been added in this response. Applicants acknowledge and thank the Examiner for withdrawing the rejections based partially on the Staffiere patent and accepted the replacement drawings.

Objection to the Specification

The Examiner objected to informalities in the specification and specifically to page 8 lines 2 of the specification. Applicants have amended the specification without adding new matter to address the Examiners Objection.

Response to 35 U.S.C. §103 Rejection

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

The Examiner rejected claims 1-10 under 35 U.S.C. §103(a) as being unpatentable over a dual Schottky diode device in view of Wagner (U.S. Patent 4,788,450, hereafter the '450 patent). The Examiner found that the dual Schottky diode device contained all the limitations "except for

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the claimed FET coupled to the second source and the claimed inverter coupled to the gate of the FET..." The Examiner then relied on the '450 patent to show; "an apparatus for providing power from a secondary power source comprising a FET (310); and inverter (381), coupled to a gate of FET (310), where the inverter (381) maintains the FET (310) in a pinched-off condition and preventing a current flow from the secondary power source (350) when the primary power source (306) is available." Applicants believe that the three basic criteria have not been met and that the claims are in condition for allowance.

Not all claim limitation taught or suggested by cited art

The dual Schottky diode device reference in view of the '450 patent, does not teach or suggest all of Applicants' claim limitations. The dual Schottky diode device reference and the '450 patent both describe switching circuit. The switching in the dual Schottky diode device occurs with diode biasing with the higher voltage always being on. Similarly, the '450 patent is a circuit to maintain a voltage level as described at column 6, lines 11-26 of the '450 patent:

If the AC power applied to primary power supply 300 fails, or if the primary voltage terminal 364, for any reason, drops below 4.5 volts, comparator 371 switches and produces a voltage on terminal 380 which has relative high positive value. This high positive value disables the field-effect conduction of field-effect transistor 360. The high positive value of voltage on terminal 380 is inverted by the action of amplifier 381 to produce a voltage near ground on conductor 382 and on the gate of field-effect transistor 360 becomes unbiased or reverse field-effect transistor 310, which causes field effect transistor 310 to enter the field-effect conduction condition. Under this condition, inherent diode 362 of field-effect transistor 360 becomes unbiased or reverse biased, and the power is supplied from backup power supply 350 by way of the conducting source-to-drain channel of field-effect transistor 310.

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Thus, the '450 patent is describing the use of a back-up power supply that is at the same voltage of the primary power supply when the primary power supply fails. This is opposed to what is claimed by Applicants.

Applicants in independent claims 1 and 6 claim "a field effect transistor, coupled to the secondary power source, where the secondary power source has a lower potential than the primary power source" and "an inverter, coupled to a gate of the field effect transistor, wherein the inverter maintains the field effect transistor in a pinched-off condition and preventing a current flow from the secondary power source where the primary power source is available". Thus, (1) the secondary power source has to have a lower potential than a primary power source and (2) the current flow is prevented from the secondary power source where the primary power source is available elements are required by the claims. But, the neither reference cited the Examiner individually or when combine teach or describe the above elements.

The Examiner did indicate that "Admission in view of Wagner do not disclose the relative potentials of the primary and secondary power sources; however, selections of values of components and operational levels for an electronic device are engineering decision based upon the system's intended use and the expected requirements of the other systems with which it will interface. MPEP 2144.04(IV)(A). In *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert denied. But, the engineering decisions are things such as dimensions or operational voltages and do not apply to the cited references. The cited references operate differently. They function to maintain power at a fixed voltage or higher voltage as described in the dual Schottky diode device and the '450 patent. More specifically, the '450 patent describes battery backup of a device with an AC power supply.

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Applicants' in their specification explains at lines 3-4, page 7 of the specification that the dual Schottky diode device operates with "whichever voltage supply has a higher potential ...will provide power." Further, the problem with the circuit is described on page 7 as "the current trend is to reduce main power voltages below that of standard batteries, such a circuit in the related art is not acceptable for increasing battery life." The '450 patent also fails to describe a circuit that prevents a current flow from the secondary power source where the primary power source is available. The whole description and focus of the teachings of the '450 patent is to switch from the primary power supply to the backup power supply when the voltage falls below 4.5 volts. Thus, there are fundamental differences between the problems being solved and the engineering.

Suggestion or motivation to combine

A prima facie case of obviousness requires that there be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings of the dual Schottky diode device with the '450 patent. The combination of the dual Schottky diode device with the '450 patent fails to describe all the elements claimed by the Applicants, thus there can be no motivation to combine because at least one element would still be missing. Any such objective reason can only be found in the teaching of the application in suit. Even if the mere fact that the prior art could be modified as proposed by the Examiner, it is not sufficient to establish a prima facie case of obviousness, In re Fritch, 972 F.2d 1260, 1266, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992).

Further, both the dual Schottky diode device and the '450 patent are both switching circuits to maintain a voltage as one power supply falls below the other or a fixed voltage. There

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is no reason to combine two switching circuit in one circuit. Further, such a combination using the teachings of the cited art requires a voltage detector element that increases the complexity and cost of any resulting circuits and would not motivate any such combination.

Therefore, the cited art cannot be combined because all the elements of Applicants' amended claims 1 and 6 are not found in the cited references and there is not motivation to have a circuit with two switching circuits and the added complexity contained in the '450 patent.

There must be a reasonable expectation of success

Prima facie obviousness requires that there must be a reasonable expectation of success when prior art is modified or combined. There is no reasonable expectation of success in achieving the invention claimed when the dual Schottky diode device is modified with the teachings of the '450 patent.

As discussed above, the combination of cited art does not contain all the elements of Applicants' claims 1 and 6. Unless all the elements are taught by the references, there can be no success in combining the cited references. Therefore, there is no reasonable expectation of success if and attempt is made to combine the cited references.

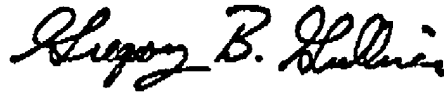
In summary, the combination of the above references does not meet the three basic criteria to establish a prima facie case of obviousness and Applicants respectfully submit that amended claims 1 and 6 are in condition for allowance. Claims that depend from allowable independent claims are allowable because they contain all the elements from the allowable claims they depend from. Therefore dependent claims 2-5 and 7-10 are also in condition for allowance.

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Conclusion

In view of the foregoing discussion, Applicants respectfully submit that claims 1-10, as presented, are in a condition for allowance, which action is earnestly solicited.

Respectfully submitted,



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